



DST Consulting Engineers Inc.  
203 - 2150 Thurston Drive  
Tel: (613) 748-1415 or 1-877-378-3745  
Fax: (613) 748-1356  
E-mail: ottawa@dstgroup.com

---

August 1, 2008

Ross and Anglin Ontario Limited, General Contractors  
1537 Michael Street,  
Ottawa, Ontario K1B 3T3

Attn: Mr. Glenn Kavanagh

RE: Phase II Environmental Site Assessment  
2920 Sheffield Road, Ottawa, Ontario

DST File No.: OE-OT-009067

## **1. Introduction**

DST Consulting Engineers Inc. (DST) is pleased to provide Ross and Anglin Ontario Limited, ("Client") with this Phase II Environmental Site Assessment (ESA) conducted for the property located at 2920 Sheffield Road, Ontario (the "site," refer to Figure 1, Attachment A). Work Authorization to proceed with this project was received from Ms. Cindy Puddicombe of Ross and Anglin Ontario Limited on July 7<sup>th</sup>, 2008, and the Phase II ESA has been completed in accordance with this Work Authorization.

DST has prepared this report for the exclusive use of Ross and Anglin Ontario Limited and/or its agents in evaluating the environmental condition of the site at the time of the field investigation. DST will not be held responsible for the use of this report by any third party, or reliance on or any decision made based on it without the prior written consent of DST. DST accepts no responsibility for damages, if any, by any third party as a result of decisions or actions based on this report.

## **2. Site Description**

The Site is a roughly rectangular-shaped property located immediately northwest of the intersection of Walkley and Sheffield Road. The approximate property dimensions are 60 meters

(m) along Walkley Road and 50 m on Sheffield Road, forming an approximately 0.3 hectare property. The property is currently vacant; however, the area surrounding the site consists of commercial and industrial property uses. The surface runoff surrounding the Site accumulates at the surface and percolates into the ground. There were no catch basins noted in the area.

The topography of the Site is relatively flat with a mound composed of fill material in the southeast portion of the site. The grade elevation of the Site is comparable to the grade elevation of the immediately adjacent lands. A steep embankment is located south of the site due to the construction of Walkley Road.

The Site Plan and its surrounding areas are illustrated in Figure 1, Attachment A.

### 3. Background

DST was provided with a document entitled "Phase I Environmental Site Assessment, Vacant Lot, 2920 Sheffield Road, Ottawa, Ontario," completed by Jacques Whitford in July 2006. The Phase I ESA identified a potential environmental risk as a result of an abandoned aboveground storage tank (AST) located off-site to the northwest of the Site. Intrusive investigation in the form of a Phase II ESA was recommended to evaluate the identified potential environmental risk.

DST reviewed the Phase I ESA and expanded the recommended workplan to include additional potential environmental concerns. Based on a review of the Phase I ESA, the parameters of potential environmental concern identified by DST included petroleum hydrocarbon fractions F1 to F4 (PHCs), benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and metals.

The potential concerns, the associated contaminants of concern, and subsequent test pits to address those concerns are summarized below:

Potential Concern	Contaminants of Potential Concern	Test Pit to Address Concern
Offsite AST to North West and former railway to the West	PHC/BTEX, PAHs, and metals	TP1
Miscellaneous Debris on Western property line and former railway to the West	PHC/BTEX, PAHs, and metals	TP2

Commercial Land Use to North of the Site	PHC/BTEX, metals and VOCs	TP3
Former Storage Container and Paint Cans	Metals and VOCs	TP4
Fill Material	PHC/BTEX and metals	TP5

#### 4. Scope of Work

In order to assess the environmental quality of soil at the Site, the following scope of work was developed in consultation with the Client:

- representative soil sampling;
- the submission of representative soil samples from each test pit location for the laboratory analyses of suspected contaminants of concern;
- Preparation of a Phase II ESA report documenting the results of the investigation, including results of soil sample analyses, comparison of analytical results to appropriate regulatory standards and the presentation of the conclusions and recommendations of the assessment.

#### 5. Methodology

##### a. Subsurface Investigation

The field program was carried out at the Site on July 21<sup>st</sup>, 2008. A total of five test pits were completed to depths of approximately 2 metres below existing surface grade (mbsg).

The test pits were excavated using a rubber-tired backhoe. Test pits were advanced to depths ranging from 1.8 metres to 2.3 metres below surface grade (mbsg). Five test pits (TP1 through to TP5) were advanced to address potential environmental concerns identified above. The locations of the test pits are presented in Figure 1 and provided in Appendix A. The excavation activities were completed by Les Entreprises MRN under the supervision of a DST site supervisor.

All soil samples retrieved during the field investigations were examined, classified, and logged according to soil type, colour, consistency, and presence of visual and/or olfactory indicators of soil impacts such as discolouration, or the presence of deleterious materials. Soil samples were collected at regular intervals as well as from each distinct stratigraphic layers. Soil samples were split and placed in plastic Ziploc bags for field screening purposes and laboratory supplied sample jars, which were subsequently placed on ice and stored in coolers for future potential laboratory analyses.

**b. Soil Sampling Program**

A trained DST staff member supervised the excavation activities and collected soil samples for field screening and laboratory analyses. All soil samples were collected in accordance with applicable environmental guidance manuals and industry practices. Soil samples were screened in the field using an RKI Eagle 101 catalytic combustible gas detector (CCGD), a Photo Ionization Detector (PID, MiniRAE 2000) and visual/olfactory observations. The readings of a CCGD and PID provide a measure of relative organic vapour levels due to the presence of potential hydrocarbon contaminants between soil samples; thus providing a tool in the evaluation of the presence of potential subsurface contamination. All recovered soil samples were also visually described and classified as per standard procedures outlined in the Canadian Foundation Engineering manual (CFEM, 2006).

Soil from each recovered sample was placed directly into laboratory supplied glass sample jars. All soil samples were placed in an ice-packed cooler prior to and during shipment to Maxxam Analytics Inc. (Maxxam) for chemical analyses.

The criteria for the selection of soil samples for laboratory analyses were based on the results of field screening and visual/olfactory observations. Selected testing was completed as follows:

**Environmental Testing for Soils**

Sample ID	Depth	Analysis			
		PHC/BTEX	Metals	VOCs	PAHs
TP1 SGS1	0.2		x		x
TP1 SGS4	1.8	x			
TP2 SGS1	0.2		x		x
TP2 SGS2	0.8	x			
TP3 SGS1	0.3		x		
TP3 SGS4	1.8	x		x	
TP4 SGS1	0.15		x		
TP4 SGS3	1.8			x	
TP5 SGS1	0.3		x		
TP5 SGS3	1.4	x			

**6. Quality Assurance / Quality Control (QA/QC)**

DST maintains a standard Quality Assurance/Quality Control (QA/QC) program for all Phase II ESAs. The field sampling and QA/QC program was completed in accordance with the document entitled: Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario (MOE, 1996). Documentation of the field results such as location, weather, field measurements, number of samples, parameters collected for, time sampled, volume, hydrocarbon readings and equipment type were completed. All project documentation is maintained under a specific project number. Soil sampling was completed in accordance with industry standards and applicable provincial guidelines/ standards. The soil samples were placed in laboratory supplied containers and maintained in ice-pack contained coolers under a

Chain of Custody protocol prior to being submitted to the laboratory for chemical analyses. The laboratory analyses were completed by Maxxam Laboratory Inc. (Maxxam), which is a certified laboratory by the Canadian Association for Environmental Analytical Laboratories (CAEAL) and/or Standards Council of Canada (SCC).

## 7. Regulatory Criteria

The soil analytical results were compared to the following standards:

- Ministry of Environment (MOE) *Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act* – Table 3, “Industrial/ Commercial Property Use” for soil.

MOE Table 3 Standards apply to the Site, as the Site and the surrounding area, within a 100m radius of the Site, are supplied by municipal drinking water and the Site is not characterized as an environmentally sensitive site under the Ontario Regulation (O.Reg.) 153/04. The Site is currently vacant. The subject site consists of mixed fill materials, sand, silt and clay. As such, the most stringent grain-size based MOE Table 3 standards for soil were used for the current assessment.

## 8. Results and Discussion

### Observations

The AST previously identified to the northwest of the Site is no longer present. The dumped materials remain along the western property line. The empty paint cans and storage trailer have been removed from the Site.

### Stratigraphy

Based on the on-site test pits, the general soil stratigraphy of the Site is characterized by a top layer of sand and gravel fill material to an average depth of 0.4 mbsg, which was underlain by a clay layer to the depth of excavation.

### Field Screening

Relative organic vapour concentration measurements recorded for the soil samples collected at the Site at various depths ranged from non-detectable to 15 ppm for RKI Eagle CCGD and non-detectable to 159 ppm for MINIRAE PID. There was no visual or olfactory evidence of petroleum hydrocarbons impact noted in any of the samples collected.

### Analytical Results

Based on a comparison of the soil sample laboratory analytical results with the MOE Table 3 standards, all soil samples met the applicable criteria for PHC F1-F4, BTEX, PAHs, VOCs, and metals. The Laboratory Certificates of Analyses are included in Attachment C.

### **Conclusions and Recommendations**

DST Consulting Engineers Inc. (DST) has completed a Phase II Environmental Site Assessment (ESA) for the property located at 2920 Sheffield Rd. in Ottawa, Ontario (the "site," refer to Figure 1, Attachment A). Authorization to proceed with this Work (Work Authorization) was received from Ms. Cindy Puddicombe of Ross and Anglin Ontario Limited, on July 7<sup>th</sup>, 2008, and the Phase II ESA has been completed in accordance with this Work Authorization.

Five test pits were excavated at the Site. Representative soil samples at varying depths were collected from each of the test pit locations, and a total of ten samples were submitted to Maxxam Analytics Inc. for chemical analyses of one or more of the following parameters: PHC F1-F4, BTEX, PAHs, VOCs or metals.

Based on the field observations and a comparison of the laboratory analytical results with the applicable provincial standards (MOE, 2004: Table 3 industrial/ commercial property use) all soil samples submitted for analyses met the applicable standard for all parameters analyzed. Thus, in regards to the subject Site no further environmental investigation is warranted at this time. Any unused materials and waste/debris accumulated onsite should be removed as best management practice and disposed of in accordance with provincial regulations.

### **9. Use and Limitations of the Report**

A description of limitations which are inherent in carrying out site investigation studies is given in Attachment E and forms an integral part of this report.

DST has prepared this report for the exclusive use of Ross and Anglin Ontario Limited and/or its agents in evaluating the environmental condition of the site at the time of the field investigation. DST will not be held responsible for the use of this report by any third party, or reliance on or any decision made based on it without the prior written consent of DST. DST accepts no responsibility for damages, if any, by any third party as a result of decisions or actions based on this report.

We trust the information herein meets your requirements. Should you have any questions, please do not hesitate to contact the undersigned.

**FOR DST CONSULTING ENGINEERS INC.**



Jane MacIntosh, B. Tech., C.C.E.P.  
Environmental Sector Head, Ottawa



Shahid Mansur, P.Eng.  
Technical Advisor

**ATTACHMENTS:**

- A. Figures
- B. Laboratory Certificates of Analysis
- C. Qualifications of Assessor(s)
- D. Limitations of the Assessment



**ATTACHMENT A**  
**Figures**

**ATTACHMENT B**  
**Laboratory Certificates of Analysis**

Your Project #: OEOT009067  
Site: SHEFFIELD  
Your C.O.C. #: 4505

**Attention: Nick Norton**  
DST Consulting Engineers  
Ottawa - Standing Offer  
2150 Thurston Dr  
Unit 203  
Ottawa, ON  
K1G 5T9

Report Date: 2008/07/28

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: A879154**  
**Received: 2008/07/21, 15:40**

Sample Matrix: Soil  
# Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Petroleum Hydro. CCME F1 & BTEX in Soil ☉	2	2008/07/22	2008/07/22	CAM SOP-00315	CCME CWS
Petroleum Hydro. CCME F1 & BTEX in Soil ☉	2	2008/07/23	2008/07/23	CAM SOP-00315	CCME CWS
Petroleum Hydrocarbons F2-F4 in Soil ☉	3	2008/07/22	2008/07/23	CAM SOP-00316	CCME CWS
Petroleum Hydrocarbons F2-F4 in Soil ☉	1	2008/07/23	2008/07/23	CAM SOP-00316	CCME CWS
Acid Extr. Metals (aqua regia) by ICPMS	5	2008/07/26	2008/07/27	CAM SOP-00447	EPA 6020
MOISTURE ☉	4	N/A	2008/07/23	CAM SOP-00445	MOE HANDBOOK(1983)
MOISTURE	3	N/A	2008/07/24	CAM SOP-00445	McKeague 2nd ed 1978
PAH Compounds in Soil by GC/MS (SIM)	2	2008/07/24	2008/07/24	CAM SOP - 00318	EPA 8270
Volatile Organic Compounds in Soil	2	N/A	2008/07/25	CAM SOP-00226	EPA 8260 modified

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Ottawa

**Encryption Key**

  
Christine McLean  
28 Jul 2008 15:22:57 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

CHRISTINE MCLEAN, Project Manager  
Email: christine.mclean@maxxamanalytics.com  
Phone# (905) 817-5700

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

For Service Group specific validation please refer to the Validation Signature Page

Total cover pages: 1

Page 1 of 21

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**O'REG 153 PETROLEUM HYDROCARBONS (SOIL)**

Maxxam ID		AA0585	AA0585	AA0587		
Sampling Date		2008/07/21	2008/07/21	2008/07/21		
COC Number		4505	4505	4505		
	Units	TP1 5654	TP1 5654 Lab-Dup	TP2 5652	RDL	QC Batch

<b>Inorganics</b>						
Moisture	%	30	31	21	0.2	1566764
<b>BTEX &amp; F1 Hydrocarbons</b>						
Benzene	ug/g	<0.02	<0.02	<0.02	0.02	1567458
Toluene	ug/g	<0.02	<0.02	<0.02	0.02	1567458
Ethylbenzene	ug/g	<0.02	<0.02	<0.02	0.02	1567458
o-Xylene	ug/g	<0.02	<0.02	<0.02	0.02	1567458
p+m-Xylene	ug/g	<0.04	<0.04	<0.04	0.04	1567458
Total Xylenes	ug/g	<0.04	<0.04	<0.04	0.04	1567458
F1 (C6-C10)	ug/g	<10	<10	<10	10	1567458
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	1567458
<b>F2-F4 Hydrocarbons</b>						
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	10	1567194
F3 (C16-C34 Hydrocarbons)	ug/g	<10	<10	<10	10	1567194
F4 (C34-C50 Hydrocarbons)	ug/g	<10	<10	<10	10	1567194
Reached Baseline at C50	ug/g	Yes	Yes	Yes		1567194
<b>Surrogate Recovery (%)</b>						
1,4-Difluorobenzene	%	97	97	96		1567458
4-Bromofluorobenzene	%	105	104	105		1567458
D10-Ethylbenzene	%	82	89	88		1567458
D4-1,2-Dichloroethane	%	80	76	77		1567458
o-Terphenyl	%	91	90	97		1567194
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**O'REG 153 PETROLEUM HYDROCARBONS (SOIL)**

Maxxam ID		AA0589		AA0593		
Sampling Date		2008/07/21		2008/07/21		
COC Number		4505		4505		
	<b>Units</b>	<b>TP3 5654</b>	<b>QC Batch</b>	<b>TP5 5653</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Inorganics</b>						
Moisture	%	28	1566764	24	0.2	1566764
<b>BTEX &amp; F1 Hydrocarbons</b>						
Benzene	ug/g		1567458	<0.02	0.02	1568100
Toluene	ug/g		1567458	<0.02	0.02	1568100
Ethylbenzene	ug/g		1567458	<0.02	0.02	1568100
o-Xylene	ug/g		1567458	<0.02	0.02	1568100
p+m-Xylene	ug/g		1567458	<0.04	0.04	1568100
Total Xylenes	ug/g		1567458	<0.04	0.04	1568100
F1 (C6-C10)	ug/g	<10	1568100	<10	10	1568100
F1 (C6-C10) - BTEX	ug/g	<10	1568100	<10	10	1568100
<b>F2-F4 Hydrocarbons</b>						
F2 (C10-C16 Hydrocarbons)	ug/g	<10	1568067	<10	10	1568067
F3 (C16-C34 Hydrocarbons)	ug/g	<10	1568067	<10	10	1568067
F4 (C34-C50 Hydrocarbons)	ug/g	<10	1568067	<10	10	1568067
Reached Baseline at C50	ug/g	Yes	1568067	Yes		1568067
<b>Surrogate Recovery (%)</b>						
1,4-Difluorobenzene	%	96	1568100	97		1568100
4-Bromofluorobenzene	%	104	1568100	104		1568100
D10-Ethylbenzene	%	85	1568100	89		1568100
D4-1,2-Dichloroethane	%	78	1568100	81		1568100
o-Terphenyl	%	101	1568067	100		1568067
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**RESULTS OF ANALYSES OF SOIL**

Maxxam ID		AA0584	AA0586		AA0591		
Sampling Date		2008/07/21	2008/07/21		2008/07/21		
COC Number		4505	4505		4505		
	<b>Units</b>	<b>TP1 5651</b>	<b>TP2 5651</b>	<b>QC Batch</b>	<b>TP4 5653</b>	<b>RDL</b>	<b>QC Batch</b>

<b>Inorganics</b>							
Moisture	%	5.5	5.8	1569851	21	0.2	1570020

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)**

Maxxam ID		AA0584		AA0586		
Sampling Date		2008/07/21		2008/07/21		
COC Number		4505		4505		
	<b>Units</b>	<b>TP1 5651</b>	<b>QC Batch</b>	<b>TP2 5651</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Metals</b>						
Acid Extractable Antimony (Sb)	ug/g	<0.2	1571422	<0.2	0.2	1571425
Acid Extractable Arsenic (As)	ug/g	3	1571422	1	1	1571425
Acid Extractable Barium (Ba)	ug/g	60	1571422	57	0.5	1571425
Acid Extractable Beryllium (Be)	ug/g	<0.2	1571422	<0.2	0.2	1571425
Acid Extractable Cadmium (Cd)	ug/g	<0.1	1571422	<0.1	0.1	1571425
Acid Extractable Chromium (Cr)	ug/g	11	1571422	10	1	1571425
Acid Extractable Cobalt (Co)	ug/g	6.4	1571422	5.4	0.1	1571425
Acid Extractable Copper (Cu)	ug/g	14	1571422	13	0.5	1571425
Acid Extractable Lead (Pb)	ug/g	8	1571422	4	1	1571425
Acid Extractable Molybdenum (Mo)	ug/g	1.3	1571422	<0.5	0.5	1571425
Acid Extractable Nickel (Ni)	ug/g	12	1571422	9.3	0.5	1571425
Acid Extractable Selenium (Se)	ug/g	<0.5	1571422	<0.5	0.5	1571425
Acid Extractable Silver (Ag)	ug/g	<0.2	1571422	<0.2	0.2	1571425
Acid Extractable Thallium (Tl)	ug/g	0.14	1571422	0.10	0.05	1571425
Acid Extractable Vanadium (V)	ug/g	19	1571422	17	5	1571425
Acid Extractable Zinc (Zn)	ug/g	24	1571422	15	5	1571425
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)**

Maxxam ID		AA0588	AA0590	AA0592		
Sampling Date		2008/07/21	2008/07/21	2008/07/21		
COC Number		4505	4505	4505		
	Units	TP3 5651	TP4 5651	TP5 5651	RDL	QC Batch
<b>Metals</b>						
Acid Extractable Antimony (Sb)	ug/g	<0.2	<0.2	<0.2	0.2	1571422
Acid Extractable Arsenic (As)	ug/g	5	6	5	1	1571422
Acid Extractable Barium (Ba)	ug/g	140	71	110	0.5	1571422
Acid Extractable Beryllium (Be)	ug/g	0.4	0.3	0.5	0.2	1571422
Acid Extractable Cadmium (Cd)	ug/g	<0.1	<0.1	0.1	0.1	1571422
Acid Extractable Chromium (Cr)	ug/g	21	16	27	1	1571422
Acid Extractable Cobalt (Co)	ug/g	11	9.3	10	0.1	1571422
Acid Extractable Copper (Cu)	ug/g	26	20	21	0.5	1571422
Acid Extractable Lead (Pb)	ug/g	16	16	16	1	1571422
Acid Extractable Molybdenum (Mo)	ug/g	2.2	3.1	1.7	0.5	1571422
Acid Extractable Nickel (Ni)	ug/g	24	19	21	0.5	1571422
Acid Extractable Selenium (Se)	ug/g	<0.5	<0.5	<0.5	0.5	1571422
Acid Extractable Silver (Ag)	ug/g	<0.2	<0.2	<0.2	0.2	1571422
Acid Extractable Thallium (Tl)	ug/g	0.26	0.23	0.24	0.05	1571422
Acid Extractable Vanadium (V)	ug/g	28	24	36	5	1571422
Acid Extractable Zinc (Zn)	ug/g	68	38	58	5	1571422
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)**

Maxxam ID		AA0584	AA0586	AA0586		
Sampling Date		2008/07/21	2008/07/21	2008/07/21		
COC Number		4505	4505	4505		
	<b>Units</b>	<b>TP1 5651</b>	<b>TP2 5651</b>	<b>TP2 5651 Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>

<b>Polyaromatic Hydrocarbons</b>						
Acenaphthene	ug/g	<0.01	<0.01	<0.01	0.01	1569548
Acenaphthylene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Anthracene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Benzo(a)anthracene	ug/g	<0.01	<0.01	<0.01	0.01	1569548
Benzo(a)pyrene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Benzo(b,j)fluoranthene	ug/g	<0.01	<0.01	<0.01	0.01	1569548
Benzo(g,h,i)perylene	ug/g	<0.02	<0.02	<0.02	0.02	1569548
Benzo(k)fluoranthene	ug/g	<0.01	<0.01	<0.01	0.01	1569548
Chrysene	ug/g	<0.01	<0.01	<0.01	0.01	1569548
Dibenz(a,h)anthracene	ug/g	<0.02	<0.02	<0.02	0.02	1569548
Fluoranthene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Fluorene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Indeno(1,2,3-cd)pyrene	ug/g	<0.02	<0.02	<0.02	0.02	1569548
1-Methylnaphthalene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
2-Methylnaphthalene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Naphthalene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Phenanthrene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
Pyrene	ug/g	<0.005	<0.005	<0.005	0.005	1569548
<b>Surrogate Recovery (%)</b>						
D10-Anthracene	%	57	66	68		1569548
D14-Terphenyl (FS)	%	51	61	63		1569548
D7-Quinoline	%	38	45	46		1569548
D8-Acenaphthylene	%	41	45	46		1569548

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**VOLATILE ORGANICS BY GC/MS (SOIL)**

Maxxam ID		AA0589	AA0591		
Sampling Date		2008/07/21	2008/07/21		
COC Number		4505	4505		
	<b>Units</b>	<b>TP3 5654</b>	<b>TP4 5653</b>	<b>RDL</b>	<b>QC Batch</b>

Volatile Organics					
Acetone (2-Propanone)	ug/g	<0.1	<0.1	0.1	1570196
Benzene	ug/g	<0.002	<0.002	0.002	1570196
Bromodichloromethane	ug/g	<0.002	<0.002	0.002	1570196
Bromoform	ug/g	<0.002	<0.002	0.002	1570196
Bromomethane	ug/g	<0.003	<0.003	0.003	1570196
Carbon Tetrachloride	ug/g	<0.002	<0.002	0.002	1570196
Chlorobenzene	ug/g	<0.002	<0.002	0.002	1570196
Chloroform	ug/g	<0.002	<0.002	0.002	1570196
Dibromochloromethane	ug/g	<0.002	<0.002	0.002	1570196
1,2-Dichlorobenzene	ug/g	<0.002	<0.002	0.002	1570196
1,3-Dichlorobenzene	ug/g	<0.002	<0.002	0.002	1570196
1,4-Dichlorobenzene	ug/g	<0.002	<0.002	0.002	1570196
1,1-Dichloroethane	ug/g	<0.002	<0.002	0.002	1570196
1,2-Dichloroethane	ug/g	<0.002	<0.002	0.002	1570196
1,1-Dichloroethylene	ug/g	<0.002	<0.002	0.002	1570196
cis-1,2-Dichloroethylene	ug/g	<0.002	<0.002	0.002	1570196
trans-1,2-Dichloroethylene	ug/g	<0.002	<0.002	0.002	1570196
1,2-Dichloropropane	ug/g	<0.002	<0.002	0.002	1570196
cis-1,3-Dichloropropene	ug/g	<0.002	<0.002	0.002	1570196
trans-1,3-Dichloropropene	ug/g	<0.002	<0.002	0.002	1570196
Ethylbenzene	ug/g	<0.002	<0.002	0.002	1570196
Ethylene Dibromide	ug/g	<0.002	<0.002	0.002	1570196
Methylene Chloride(Dichloromethane)	ug/g	<0.003	<0.003	0.003	1570196
Methyl Isobutyl Ketone	ug/g	<0.03	<0.03	0.03	1570196
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.03	<0.03	0.03	1570196
Methyl t-butyl ether (MTBE)	ug/g	<0.002	<0.002	0.002	1570196
Styrene	ug/g	<0.002	<0.002	0.002	1570196
1,1,1,2-Tetrachloroethane	ug/g	<0.002	<0.002	0.002	1570196
1,1,2,2-Tetrachloroethane	ug/g	<0.002	<0.002	0.002	1570196
Tetrachloroethylene	ug/g	0.021	0.004	0.002	1570196
Toluene	ug/g	<0.002	<0.002	0.002	1570196
1,1,1-Trichloroethane	ug/g	<0.002	<0.002	0.002	1570196

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**VOLATILE ORGANICS BY GC/MS (SOIL)**

Maxxam ID		AA0589	AA0591		
Sampling Date		2008/07/21	2008/07/21		
COC Number		4505	4505		
	<b>Units</b>	<b>TP3 5654</b>	<b>TP4 5653</b>	<b>RDL</b>	<b>QC Batch</b>
1,1,2-Trichloroethane	ug/g	<0.002	<0.002	0.002	1570196
Trichloroethylene	ug/g	<0.002	<0.002	0.002	1570196
Vinyl Chloride	ug/g	<0.002	<0.002	0.002	1570196
p+m-Xylene	ug/g	<0.002	<0.002	0.002	1570196
o-Xylene	ug/g	<0.002	<0.002	0.002	1570196
Xylene (Total)	ug/g	<0.002	<0.002	0.002	1570196
<b>Surrogate Recovery (%)</b>					
4-Bromofluorobenzene	%	91	94		1570196
D4-1,2-Dichloroethane	%	77	80		1570196
D8-Toluene	%	110	107		1570196
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					

Maxxam Job #: A879154  
Report Date: 2008/07/28

DST Consulting Engineers  
Client Project #: OEOT009067  
Project name: SHEFFIELD  
Sampler Initials: NM

**GENERAL COMMENTS**

Results relate only to the items tested.

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report  
Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1566764 PRB	RPD [AA0585-01]	Moisture	2008/07/23	0.7		%	50
1567194 PRB	MATRIX SPIKE [AA0587-01]	o-Terphenyl	2008/07/23		102	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/23		84	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/23		84	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/23		84	%	60 - 130
	Spiked Blank	o-Terphenyl	2008/07/23		92	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/23		98	%	60 - 130
		F3 (C16-C34 Hydrocarbons)	2008/07/23		98	%	60 - 130
		F4 (C34-C50 Hydrocarbons)	2008/07/23		98	%	60 - 130
	Method Blank	o-Terphenyl	2008/07/23		95	%	30 - 130
		F2 (C10-C16 Hydrocarbons)	2008/07/23	<10		ug/g	
		F3 (C16-C34 Hydrocarbons)	2008/07/23	<10		ug/g	
		F4 (C34-C50 Hydrocarbons)	2008/07/23	<10		ug/g	
	RPD [AA0585-01]	F2 (C10-C16 Hydrocarbons)	2008/07/23	NC		%	50
		F3 (C16-C34 Hydrocarbons)	2008/07/23	NC		%	50
		F4 (C34-C50 Hydrocarbons)	2008/07/23	NC		%	50
1567458 STE	MATRIX SPIKE [AA0587-01]	1,4-Difluorobenzene	2008/07/22		101	%	60 - 140
		4-Bromofluorobenzene	2008/07/22		106	%	60 - 140
		D10-Ethylbenzene	2008/07/22		86	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/22		88	%	60 - 140
		Benzene	2008/07/22		91	%	60 - 140
		Toluene	2008/07/22		83	%	60 - 140
		Ethylbenzene	2008/07/22		82	%	60 - 140
		o-Xylene	2008/07/22		86	%	60 - 140
		p+m-Xylene	2008/07/22		78	%	60 - 140
		F1 (C6-C10)	2008/07/22		79	%	60 - 140
	Spiked Blank	1,4-Difluorobenzene	2008/07/22		96	%	60 - 140
		4-Bromofluorobenzene	2008/07/22		104	%	60 - 140
		D10-Ethylbenzene	2008/07/22		92	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/22		74	%	60 - 140
		Benzene	2008/07/22		80	%	60 - 140
		Toluene	2008/07/22		77	%	60 - 140
		Ethylbenzene	2008/07/22		85	%	60 - 140
		o-Xylene	2008/07/22		84	%	60 - 140
		p+m-Xylene	2008/07/22		80	%	60 - 140
		F1 (C6-C10)	2008/07/22		86	%	60 - 140
	Method Blank	1,4-Difluorobenzene	2008/07/22		97	%	60 - 140
		4-Bromofluorobenzene	2008/07/22		105	%	60 - 140
		D10-Ethylbenzene	2008/07/22		94	%	30 - 130
		D4-1,2-Dichloroethane	2008/07/22		76	%	60 - 140
		Benzene	2008/07/22	<0.02		ug/g	
		Toluene	2008/07/22	<0.02		ug/g	
		Ethylbenzene	2008/07/22	<0.02		ug/g	
		o-Xylene	2008/07/22	<0.02		ug/g	
		p+m-Xylene	2008/07/22	<0.04		ug/g	
		Total Xylenes	2008/07/22	<0.04		ug/g	
		F1 (C6-C10)	2008/07/22	<10		ug/g	
		F1 (C6-C10) - BTEX	2008/07/22	<10		ug/g	
	RPD [AA0585-01]	Benzene	2008/07/22	NC		%	50
		Toluene	2008/07/22	NC		%	50
		Ethylbenzene	2008/07/22	NC		%	50
		o-Xylene	2008/07/22	NC		%	50
		p+m-Xylene	2008/07/22	NC		%	50

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed	Value	Recovery	Units	QC Limits
Num Init			yyyy/mm/dd				
1567458	STE	RPD [AA0585-01]	Total Xylenes	2008/07/22	NC	%	50
			F1 (C6-C10)	2008/07/22	NC	%	50
			F1 (C6-C10) - BTEX	2008/07/22	NC	%	50
1568067	PRB	MATRIX SPIKE	o-Terphenyl	2008/07/23		99 %	30 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/23		105 %	60 - 130
			F3 (C16-C34 Hydrocarbons)	2008/07/23		105 %	60 - 130
			F4 (C34-C50 Hydrocarbons)	2008/07/23		105 %	60 - 130
		Spiked Blank	o-Terphenyl	2008/07/23		100 %	30 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/23		86 %	60 - 130
			F3 (C16-C34 Hydrocarbons)	2008/07/23		86 %	60 - 130
			F4 (C34-C50 Hydrocarbons)	2008/07/23		86 %	60 - 130
		Method Blank	o-Terphenyl	2008/07/23		96 %	30 - 130
			F2 (C10-C16 Hydrocarbons)	2008/07/23	<10	ug/g	
			F4 (C34-C50 Hydrocarbons)	2008/07/23	<10	ug/g	
		RPD	F2 (C10-C16 Hydrocarbons)	2008/07/23	NC	%	50
			F3 (C16-C34 Hydrocarbons)	2008/07/23	NC	%	50
			F4 (C34-C50 Hydrocarbons)	2008/07/23	NC	%	50
1568100	STE	MATRIX SPIKE	1,4-Difluorobenzene	2008/07/23		95 %	60 - 140
			4-Bromofluorobenzene	2008/07/23		102 %	60 - 140
			D10-Ethylbenzene	2008/07/23		81 %	30 - 130
			D4-1,2-Dichloroethane	2008/07/23		72 %	60 - 140
			Benzene	2008/07/23		82 %	60 - 140
			Toluene	2008/07/23		79 %	60 - 140
			Ethylbenzene	2008/07/23		86 %	60 - 140
			o-Xylene	2008/07/23		83 %	60 - 140
			p+m-Xylene	2008/07/23		82 %	60 - 140
		Spiked Blank	F1 (C6-C10)	2008/07/23		89 %	60 - 140
			1,4-Difluorobenzene	2008/07/23		96 %	60 - 140
			4-Bromofluorobenzene	2008/07/23		103 %	60 - 140
			D10-Ethylbenzene	2008/07/23		86 %	30 - 130
			D4-1,2-Dichloroethane	2008/07/23		72 %	60 - 140
			Benzene	2008/07/23		85 %	60 - 140
			Toluene	2008/07/23		82 %	60 - 140
			Ethylbenzene	2008/07/23		90 %	60 - 140
			o-Xylene	2008/07/23		87 %	60 - 140
			p+m-Xylene	2008/07/23		85 %	60 - 140
		Method Blank	F1 (C6-C10)	2008/07/23		89 %	60 - 140
			1,4-Difluorobenzene	2008/07/23		93 %	60 - 140
			4-Bromofluorobenzene	2008/07/23		104 %	60 - 140
			D10-Ethylbenzene	2008/07/23		86 %	30 - 130
			D4-1,2-Dichloroethane	2008/07/23		73 %	60 - 140
			Benzene	2008/07/23	<0.02	ug/g	
			Toluene	2008/07/23	<0.02	ug/g	
			Ethylbenzene	2008/07/23	<0.02	ug/g	
			o-Xylene	2008/07/23	<0.02	ug/g	
			p+m-Xylene	2008/07/23	<0.04	ug/g	
			Total Xylenes	2008/07/23	<0.04	ug/g	
			F1 (C6-C10)	2008/07/23	<10	ug/g	
			F1 (C6-C10) - BTEX	2008/07/23	<10	ug/g	
		RPD	Benzene	2008/07/23	NC	%	50
			Toluene	2008/07/23	NC	%	50
			Ethylbenzene	2008/07/23	NC	%	50
			o-Xylene	2008/07/23	NC	%	50
			p+m-Xylene	2008/07/23	NC	%	50
			Total Xylenes	2008/07/23	NC	%	50

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1568100 STE	RPD	F1 (C6-C10)	2008/07/23	NC		%	50
		F1 (C6-C10) - BTEX	2008/07/23	NC		%	50
1569548 JJI	MATRIX SPIKE [AA0586-01]	D10-Anthracene	2008/07/24		72	%	30 - 130
		D14-Terphenyl (FS)	2008/07/24		67	%	30 - 130
		D7-Quinoline	2008/07/24		52	%	30 - 130
		D8-Acenaphthylene	2008/07/24		49	%	30 - 130
		Acenaphthene	2008/07/24		57	%	30 - 130
		Acenaphthylene	2008/07/24		54	%	30 - 130
		Anthracene	2008/07/24		72	%	30 - 130
		Benzo(a)anthracene	2008/07/24		81	%	30 - 130
		Benzo(a)pyrene	2008/07/24		84	%	30 - 130
		Benzo(b/j)fluoranthene	2008/07/24		84	%	30 - 130
		Benzo(g,h,i)perylene	2008/07/24		78	%	30 - 130
		Benzo(k)fluoranthene	2008/07/24		85	%	30 - 130
		Chrysene	2008/07/24		84	%	30 - 130
		Dibenz(a,h)anthracene	2008/07/24		68	%	30 - 130
		Fluoranthene	2008/07/24		74	%	30 - 130
		Fluorene	2008/07/24		58	%	30 - 130
		Indeno(1,2,3-cd)pyrene	2008/07/24		72	%	30 - 130
		1-Methylnaphthalene	2008/07/24		55	%	30 - 130
		2-Methylnaphthalene	2008/07/24		58	%	30 - 130
		Naphthalene	2008/07/24		57	%	30 - 130
		Phenanthrene	2008/07/24		77	%	30 - 130
		Pyrene	2008/07/24		73	%	30 - 130
	Spiked Blank	D10-Anthracene	2008/07/24		70	%	30 - 130
		D14-Terphenyl (FS)	2008/07/24		63	%	30 - 130
		D7-Quinoline	2008/07/24		59	%	30 - 130
		D8-Acenaphthylene	2008/07/24		55	%	30 - 130
		Acenaphthene	2008/07/24		62	%	30 - 130
		Acenaphthylene	2008/07/24		59	%	30 - 130
		Anthracene	2008/07/24		68	%	30 - 130
		Benzo(a)anthracene	2008/07/24		74	%	30 - 130
		Benzo(a)pyrene	2008/07/24		78	%	30 - 130
		Benzo(b/j)fluoranthene	2008/07/24		81	%	30 - 130
		Benzo(g,h,i)perylene	2008/07/24		73	%	30 - 130
		Benzo(k)fluoranthene	2008/07/24		81	%	30 - 130
		Chrysene	2008/07/24		78	%	30 - 130
		Dibenz(a,h)anthracene	2008/07/24		62	%	30 - 130
		Fluoranthene	2008/07/24		69	%	30 - 130
		Fluorene	2008/07/24		59	%	30 - 130
		Indeno(1,2,3-cd)pyrene	2008/07/24		66	%	30 - 130
		1-Methylnaphthalene	2008/07/24		66	%	30 - 130
		2-Methylnaphthalene	2008/07/24		71	%	30 - 130
		Naphthalene	2008/07/24		70	%	30 - 130
		Phenanthrene	2008/07/24		73	%	30 - 130
		Pyrene	2008/07/24		68	%	30 - 130
	Method Blank	D10-Anthracene	2008/07/24		67	%	30 - 130
		D14-Terphenyl (FS)	2008/07/24		59	%	30 - 130
		D7-Quinoline	2008/07/24		54	%	30 - 130
		D8-Acenaphthylene	2008/07/24		51	%	30 - 130
		Acenaphthene	2008/07/24	<0.01		ug/g	
		Acenaphthylene	2008/07/24	<0.005		ug/g	
		Anthracene	2008/07/24	<0.005		ug/g	
		Benzo(a)anthracene	2008/07/24	<0.01		ug/g	

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed	Value	Recovery	Units	QC Limits
1569548 JJI	Method Blank	Benzo(a)pyrene	2008/07/24	<0.005		ug/g	
		Benzo(b/j)fluoranthene	2008/07/24	<0.01		ug/g	
		Benzo(g,h,i)perylene	2008/07/24	<0.02		ug/g	
		Benzo(k)fluoranthene	2008/07/24	<0.01		ug/g	
		Chrysene	2008/07/24	<0.01		ug/g	
		Dibenz(a,h)anthracene	2008/07/24	<0.02		ug/g	
		Fluoranthene	2008/07/24	<0.005		ug/g	
		Fluorene	2008/07/24	<0.005		ug/g	
		Indeno(1,2,3-cd)pyrene	2008/07/24	<0.02		ug/g	
		1-Methylnaphthalene	2008/07/24	<0.005		ug/g	
		2-Methylnaphthalene	2008/07/24	<0.005		ug/g	
		Naphthalene	2008/07/24	<0.005		ug/g	
		Phenanthrene	2008/07/24	<0.005		ug/g	
		Pyrene	2008/07/24	<0.005		ug/g	
	RPD [AA0586-01]	Acenaphthene	2008/07/24	NC		%	50
		Acenaphthylene	2008/07/24	NC		%	50
		Anthracene	2008/07/24	NC		%	50
		Benzo(a)anthracene	2008/07/24	NC		%	50
		Benzo(a)pyrene	2008/07/24	NC		%	50
		Benzo(b/j)fluoranthene	2008/07/24	NC		%	50
		Benzo(g,h,i)perylene	2008/07/24	NC		%	50
		Benzo(k)fluoranthene	2008/07/24	NC		%	50
		Chrysene	2008/07/24	NC		%	50
		Dibenz(a,h)anthracene	2008/07/24	NC		%	50
		Fluoranthene	2008/07/24	NC		%	50
		Fluorene	2008/07/24	NC		%	50
		Indeno(1,2,3-cd)pyrene	2008/07/24	NC		%	50
		1-Methylnaphthalene	2008/07/24	NC		%	50
		2-Methylnaphthalene	2008/07/24	NC		%	50
		Naphthalene	2008/07/24	NC		%	50
		Phenanthrene	2008/07/24	NC		%	50
		Pyrene	2008/07/24	NC		%	50
1569851 FOT	RPD	Moisture	2008/07/24	4.3		%	50
1570020 FOT	RPD	Moisture	2008/07/24	0.5		%	50
1570196 SRY	MATRIX SPIKE	4-Bromofluorobenzene	2008/07/25		98	%	60 - 140
		D4-1,2-Dichloroethane	2008/07/25		98	%	60 - 140
		D8-Toluene	2008/07/25		98	%	60 - 140
		Acetone (2-Propanone)	2008/07/25		67	%	24 - 171
		Benzene	2008/07/25		72	%	39 - 137
		Bromodichloromethane	2008/07/25		76	%	45 - 131
		Bromoform	2008/07/25		66	%	44 - 131
		Bromomethane	2008/07/25		76	%	20 - 146
		Carbon Tetrachloride	2008/07/25		93	%	40 - 139
		Chlorobenzene	2008/07/25		75	%	45 - 140
		Chloroform	2008/07/25		82	%	48 - 128
		Dibromochloromethane	2008/07/25		78	%	52 - 135
		1,2-Dichlorobenzene	2008/07/25		80	%	39 - 145
		1,3-Dichlorobenzene	2008/07/25		85	%	38 - 158
		1,4-Dichlorobenzene	2008/07/25		85	%	35 - 159
		1,1-Dichloroethane	2008/07/25		77	%	48 - 131
		1,2-Dichloroethane	2008/07/25		78	%	43 - 123
		1,1-Dichloroethylene	2008/07/25		80	%	50 - 134
		cis-1,2-Dichloroethylene	2008/07/25		77	%	45 - 136
		trans-1,2-Dichloroethylene	2008/07/25		79	%	45 - 138
		1,2-Dichloropropane	2008/07/25		68	%	51 - 130



DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
1570196 SRY	MATRIX SPIKE	cis-1,3-Dichloropropene	2008/07/25		77	%	39 - 143		
		trans-1,3-Dichloropropene	2008/07/25		69	%	33 - 135		
		Ethylbenzene	2008/07/25		79	%	46 - 150		
		Ethylene Dibromide	2008/07/25		72	%	48 - 136		
		Methylene Chloride(Dichloromethane)	2008/07/25		72	%	47 - 124		
		Methyl Isobutyl Ketone	2008/07/25		49	%	48 - 133		
		Methyl Ethyl Ketone (2-Butanone)	2008/07/25		53	%	39 - 160		
		Methyl t-butyl ether (MTBE)	2008/07/25		71	%	37 - 150		
		Styrene	2008/07/25		82	%	27 - 148		
		1,1,1,2-Tetrachloroethane	2008/07/25		81	%	51 - 140		
		1,1,2,2-Tetrachloroethane	2008/07/25		64	%	46 - 128		
		Tetrachloroethylene	2008/07/25		88	%	45 - 154		
		Toluene	2008/07/25		74	%	30 - 158		
		1,1,1-Trichloroethane	2008/07/25		91	%	44 - 136		
		1,1,2-Trichloroethane	2008/07/25		67	%	56 - 135		
		Trichloroethylene	2008/07/25		83	%	39 - 146		
		Vinyl Chloride	2008/07/25		79	%	34 - 136		
		p+m-Xylene	2008/07/25		78	%	29 - 161		
		o-Xylene	2008/07/25		81	%	45 - 150		
		Spiked Blank		4-Bromofluorobenzene	2008/07/24		97	%	60 - 140
				D4-1,2-Dichloroethane	2008/07/24		77	%	60 - 140
				D8-Toluene	2008/07/24		111	%	60 - 140
				Acetone (2-Propanone)	2008/07/24		48 (f)	%	60 - 140
				Benzene	2008/07/24		102	%	60 - 140
				Bromodichloromethane	2008/07/24		88	%	60 - 140
				Bromoform	2008/07/24		74	%	60 - 140
				Bromomethane	2008/07/24		110	%	60 - 140
				Carbon Tetrachloride	2008/07/24		113	%	60 - 140
				Chlorobenzene	2008/07/24		108	%	60 - 140
				Chloroform	2008/07/24		100	%	60 - 140
				Dibromochloromethane	2008/07/24		88	%	60 - 140
				1,2-Dichlorobenzene	2008/07/24		111	%	60 - 140
				1,3-Dichlorobenzene	2008/07/24		126	%	60 - 140
				1,4-Dichlorobenzene	2008/07/24		115	%	60 - 140
				1,1-Dichloroethane	2008/07/24		104	%	60 - 140
				1,2-Dichloroethane	2008/07/24		77	%	60 - 140
				1,1-Dichloroethylene	2008/07/24		111	%	60 - 140
				cis-1,2-Dichloroethylene	2008/07/24		109	%	60 - 140
				trans-1,2-Dichloroethylene	2008/07/24		116	%	60 - 140
				1,2-Dichloropropane	2008/07/24		94	%	60 - 140
cis-1,3-Dichloropropene	2008/07/24				80	%	60 - 140		
trans-1,3-Dichloropropene	2008/07/24				79	%	60 - 140		
Ethylbenzene	2008/07/24				115	%	60 - 140		
Ethylene Dibromide	2008/07/24				88	%	60 - 140		
Methylene Chloride(Dichloromethane)	2008/07/24				93	%	60 - 140		
Methyl Isobutyl Ketone	2008/07/24				58 (f)	%	60 - 140		
Methyl Ethyl Ketone (2-Butanone)	2008/07/24				52 (f)	%	60 - 140		
Methyl t-butyl ether (MTBE)	2008/07/24				82	%	60 - 140		
Styrene	2008/07/24				101	%	60 - 140		
1,1,1,2-Tetrachloroethane	2008/07/24				112	%	60 - 140		
1,1,2,2-Tetrachloroethane	2008/07/24				78	%	60 - 140		
Tetrachloroethylene	2008/07/24				126	%	60 - 140		
Toluene	2008/07/24				116	%	60 - 140		
1,1,1-Trichloroethane	2008/07/24				110	%	60 - 140		
1,1,2-Trichloroethane	2008/07/24				94	%	60 - 140		

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
1570196 SRY	Spiked Blank	Trichloroethylene	2008/07/24		108	%	60 - 140
		Vinyl Chloride	2008/07/24		103	%	60 - 140
		p+m-Xylene	2008/07/24		111	%	60 - 140
		o-Xylene	2008/07/24		118	%	60 - 140
	Method Blank	4-Bromofluorobenzene	2008/07/24		90	%	60 - 140
		D4-1,2-Dichloroethane	2008/07/24		81	%	60 - 140
		D8-Toluene	2008/07/24		107	%	60 - 140
		Acetone (2-Propanone)	2008/07/24	<0.1		ug/g	
		Benzene	2008/07/24	<0.002		ug/g	
		Bromodichloromethane	2008/07/24	<0.002		ug/g	
		Bromoform	2008/07/24	<0.002		ug/g	
		Bromomethane	2008/07/24	<0.003		ug/g	
		Carbon Tetrachloride	2008/07/24	<0.002		ug/g	
		Chlorobenzene	2008/07/24	<0.002		ug/g	
		Chloroform	2008/07/24	<0.002		ug/g	
		Dibromochloromethane	2008/07/24	<0.002		ug/g	
		1,2-Dichlorobenzene	2008/07/24	<0.002		ug/g	
		1,3-Dichlorobenzene	2008/07/24	<0.002		ug/g	
		1,4-Dichlorobenzene	2008/07/24	<0.002		ug/g	
		1,1-Dichloroethane	2008/07/24	<0.002		ug/g	
		1,2-Dichloroethane	2008/07/24	<0.002		ug/g	
		1,1-Dichloroethylene	2008/07/24	<0.002		ug/g	
		cis-1,2-Dichloroethylene	2008/07/24	<0.002		ug/g	
		trans-1,2-Dichloroethylene	2008/07/24	<0.002		ug/g	
		1,2-Dichloropropane	2008/07/24	<0.002		ug/g	
		cis-1,3-Dichloropropene	2008/07/24	<0.002		ug/g	
		trans-1,3-Dichloropropene	2008/07/24	<0.002		ug/g	
		Ethylbenzene	2008/07/24	<0.002		ug/g	
		Ethylene Dibromide	2008/07/24	<0.002		ug/g	
		Methylene Chloride(Dichloromethane)	2008/07/24	<0.003		ug/g	
		Methyl Isobutyl Ketone	2008/07/24	<0.03		ug/g	
		Methyl Ethyl Ketone (2-Butanone)	2008/07/24	<0.03		ug/g	
		Methyl t-butyl ether (MTBE)	2008/07/24	<0.002		ug/g	
		Styrene	2008/07/24	<0.002		ug/g	
		1,1,1,2-Tetrachloroethane	2008/07/24	<0.002		ug/g	
		1,1,2,2-Tetrachloroethane	2008/07/24	<0.002		ug/g	
		Tetrachloroethylene	2008/07/24	<0.002		ug/g	
		Toluene	2008/07/24	<0.002		ug/g	
		1,1,1-Trichloroethane	2008/07/24	<0.002		ug/g	
		1,1,2-Trichloroethane	2008/07/24	<0.002		ug/g	
		Trichloroethylene	2008/07/24	<0.002		ug/g	
		Vinyl Chloride	2008/07/24	<0.002		ug/g	
		p+m-Xylene	2008/07/24	<0.002		ug/g	
		o-Xylene	2008/07/24	<0.002		ug/g	
		Xylene (Total)	2008/07/24	<0.002		ug/g	
	RPD	Acetone (2-Propanone)	2008/07/25	NC		%	50
		Benzene	2008/07/25	NC		%	50
		Bromodichloromethane	2008/07/25	NC		%	50
		Bromoform	2008/07/25	NC		%	50
		Bromomethane	2008/07/25	NC		%	50
		Carbon Tetrachloride	2008/07/25	NC		%	50
		Chlorobenzene	2008/07/25	NC		%	50
		Chloroform	2008/07/25	NC		%	50
		Dibromochloromethane	2008/07/25	NC		%	50
		1,2-Dichlorobenzene	2008/07/25	NC		%	50

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
1570196 SRY	RPD	1,3-Dichlorobenzene	2008/07/25	NC		%	50		
		1,4-Dichlorobenzene	2008/07/25	NC		%	50		
		1,1-Dichloroethane	2008/07/25	NC		%	50		
		1,2-Dichloroethane	2008/07/25	NC		%	50		
		1,1-Dichloroethylene	2008/07/25	NC		%	50		
		cis-1,2-Dichloroethylene	2008/07/25	NC		%	50		
		trans-1,2-Dichloroethylene	2008/07/25	NC		%	50		
		1,2-Dichloropropane	2008/07/25	NC		%	50		
		cis-1,3-Dichloropropene	2008/07/25	NC		%	50		
		trans-1,3-Dichloropropene	2008/07/25	NC		%	50		
		Ethylbenzene	2008/07/25	NC		%	50		
		Ethylene Dibromide	2008/07/25	NC		%	50		
		Methylene Chloride(Dichloromethane)	2008/07/25	NC		%	50		
		Methyl Isobutyl Ketone	2008/07/25	NC		%	50		
		Methyl Ethyl Ketone (2-Butanone)	2008/07/25	NC		%	50		
		Methyl t-butyl ether (MTBE)	2008/07/25	NC		%	50		
		Styrene	2008/07/25	NC		%	50		
		1,1,1,2-Tetrachloroethane	2008/07/25	NC		%	50		
		1,1,2,2-Tetrachloroethane	2008/07/25	NC		%	50		
		Tetrachloroethylene	2008/07/25	NC		%	50		
		Toluene	2008/07/25	NC		%	50		
		1,1,1-Trichloroethane	2008/07/25	NC		%	50		
		1,1,2-Trichloroethane	2008/07/25	NC		%	50		
		Trichloroethylene	2008/07/25	NC		%	50		
		Vinyl Chloride	2008/07/25	NC		%	50		
		p+m-Xylene	2008/07/25	NC		%	50		
		o-Xylene	2008/07/25	NC		%	50		
		Xylene (Total)	2008/07/25	NC		%	50		
		1571422 VIV	MATRIX SPIKE	Acid Extractable Antimony (Sb)	2008/07/27		96	%	75 - 125
				Acid Extractable Arsenic (As)	2008/07/27		99	%	75 - 125
				Acid Extractable Barium (Ba)	2008/07/27		99	%	75 - 125
				Acid Extractable Beryllium (Be)	2008/07/27		100	%	75 - 125
Acid Extractable Cadmium (Cd)	2008/07/27				101	%	75 - 125		
Acid Extractable Chromium (Cr)	2008/07/27				102	%	75 - 125		
Acid Extractable Cobalt (Co)	2008/07/27				98	%	75 - 125		
Acid Extractable Copper (Cu)	2008/07/27				96	%	75 - 125		
Acid Extractable Lead (Pb)	2008/07/27				97	%	75 - 125		
Acid Extractable Molybdenum (Mo)	2008/07/27				103	%	75 - 125		
Acid Extractable Nickel (Ni)	2008/07/27				99	%	75 - 125		
Acid Extractable Selenium (Se)	2008/07/27				100	%	75 - 125		
Acid Extractable Silver (Ag)	2008/07/27				87	%	75 - 125		
Acid Extractable Thallium (Tl)	2008/07/27				90	%	75 - 125		
Acid Extractable Vanadium (V)	2008/07/27				102	%	75 - 125		
Acid Extractable Zinc (Zn)	2008/07/27				NC (2)	%	75 - 125		
QC STANDARD	Acid Extractable Antimony (Sb)		2008/07/27		85	%	75 - 125		
	Acid Extractable Arsenic (As)		2008/07/27		100	%	75 - 125		
	Acid Extractable Barium (Ba)		2008/07/27		99	%	75 - 125		
	Acid Extractable Beryllium (Be)		2008/07/27		94	%	75 - 125		
	Acid Extractable Cadmium (Cd)		2008/07/27		93	%	75 - 125		
	Acid Extractable Chromium (Cr)		2008/07/27		95	%	75 - 125		
	Acid Extractable Cobalt (Co)		2008/07/27		92	%	75 - 125		
	Acid Extractable Copper (Cu)		2008/07/27		96	%	75 - 125		
	Acid Extractable Lead (Pb)		2008/07/27		102	%	75 - 125		
	Acid Extractable Molybdenum (Mo)		2008/07/27		96	%	75 - 125		
	Acid Extractable Nickel (Ni)		2008/07/27		93	%	75 - 125		

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
1571422 VIV	QC STANDARD	Acid Extractable Selenium (Se)	2008/07/27		128	%	50 - 150		
		Acid Extractable Silver (Ag)	2008/07/27		84	%	75 - 125		
		Acid Extractable Thallium (Tl)	2008/07/27		89	%	75 - 125		
		Acid Extractable Vanadium (V)	2008/07/27		104	%	75 - 125		
	Method Blank	Acid Extractable Zinc (Zn)	2008/07/27			97	%	75 - 125	
		Acid Extractable Antimony (Sb)	2008/07/27	<0.2			ug/g		
		Acid Extractable Arsenic (As)	2008/07/27	<1			ug/g		
		Acid Extractable Barium (Ba)	2008/07/27	<0.5			ug/g		
		Acid Extractable Beryllium (Be)	2008/07/27	<0.2			ug/g		
		Acid Extractable Cadmium (Cd)	2008/07/27	<0.1			ug/g		
		Acid Extractable Chromium (Cr)	2008/07/27	<1			ug/g		
		Acid Extractable Cobalt (Co)	2008/07/27	<0.1			ug/g		
		Acid Extractable Copper (Cu)	2008/07/27	<0.5			ug/g		
		Acid Extractable Lead (Pb)	2008/07/27	<1			ug/g		
		Acid Extractable Molybdenum (Mo)	2008/07/27	<0.5			ug/g		
		Acid Extractable Nickel (Ni)	2008/07/27	<0.5			ug/g		
		Acid Extractable Selenium (Se)	2008/07/27	<0.5			ug/g		
		Acid Extractable Silver (Ag)	2008/07/27	<0.2			ug/g		
		Acid Extractable Thallium (Tl)	2008/07/27	<0.05			ug/g		
		Acid Extractable Vanadium (V)	2008/07/27	<5			ug/g		
	Acid Extractable Zinc (Zn)	2008/07/27	<5			ug/g			
	RPD	Acid Extractable Antimony (Sb)	2008/07/27	NC			%	35	
		Acid Extractable Arsenic (As)	2008/07/27	NC			%	35	
		Acid Extractable Barium (Ba)	2008/07/27	7.1			%	35	
		Acid Extractable Beryllium (Be)	2008/07/27	NC			%	35	
		Acid Extractable Cadmium (Cd)	2008/07/27	NC			%	35	
		Acid Extractable Chromium (Cr)	2008/07/27	8.3			%	35	
		Acid Extractable Cobalt (Co)	2008/07/27	4.5			%	35	
		Acid Extractable Copper (Cu)	2008/07/27	2.4			%	35	
		Acid Extractable Lead (Pb)	2008/07/27	NC			%	35	
		Acid Extractable Molybdenum (Mo)	2008/07/27	NC			%	35	
		Acid Extractable Nickel (Ni)	2008/07/27	5.1			%	35	
		Acid Extractable Selenium (Se)	2008/07/27	NC			%	35	
		Acid Extractable Silver (Ag)	2008/07/27	NC			%	35	
		Acid Extractable Thallium (Tl)	2008/07/27	NC			%	35	
Acid Extractable Vanadium (V)		2008/07/27	NC			%	35		
Acid Extractable Zinc (Zn)		2008/07/27	4.8			%	35		
1571425 VIV		MATRIX SPIKE	Acid Extractable Antimony (Sb)	2008/07/27		108	%	75 - 125	
			Acid Extractable Arsenic (As)	2008/07/27		111	%	75 - 125	
			Acid Extractable Barium (Ba)	2008/07/27		104	%	75 - 125	
	Acid Extractable Beryllium (Be)		2008/07/27		101	%	75 - 125		
	Acid Extractable Cadmium (Cd)		2008/07/27		106	%	75 - 125		
	Acid Extractable Chromium (Cr)		2008/07/27		111	%	75 - 125		
	Acid Extractable Cobalt (Co)		2008/07/27		107	%	75 - 125		
	Acid Extractable Copper (Cu)		2008/07/27		NC (3)	%	75 - 125		
	Acid Extractable Lead (Pb)		2008/07/27		95	%	75 - 125		
	Acid Extractable Molybdenum (Mo)		2008/07/27		110	%	75 - 125		
	Acid Extractable Nickel (Ni)		2008/07/27		111	%	75 - 125		
	Acid Extractable Selenium (Se)		2008/07/27		105	%	75 - 125		
	Acid Extractable Silver (Ag)		2008/07/27		99	%	75 - 125		
	Acid Extractable Thallium (Tl)		2008/07/27		96	%	75 - 125		
	Acid Extractable Vanadium (V)		2008/07/27		NC (3)	%	75 - 125		
	Acid Extractable Zinc (Zn)		2008/07/27		NC (3)	%	75 - 125		
	QC STANDARD		Acid Extractable Antimony (Sb)	2008/07/27			86	%	75 - 125
			Acid Extractable Arsenic (As)	2008/07/27			94	%	75 - 125

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits		
1571425 VIV	QC STANDARD	Acid Extractable Barium (Ba)	2008/07/27		97	%	75 - 125		
		Acid Extractable Beryllium (Be)	2008/07/27		81	%	75 - 125		
		Acid Extractable Cadmium (Cd)	2008/07/27		90	%	75 - 125		
		Acid Extractable Chromium (Cr)	2008/07/27		91	%	75 - 125		
		Acid Extractable Cobalt (Co)	2008/07/27		91	%	75 - 125		
		Acid Extractable Copper (Cu)	2008/07/27		91	%	75 - 125		
		Acid Extractable Lead (Pb)	2008/07/27		98	%	75 - 125		
		Acid Extractable Molybdenum (Mo)	2008/07/27		89	%	75 - 125		
		Acid Extractable Nickel (Ni)	2008/07/27		90	%	75 - 125		
		Acid Extractable Selenium (Se)	2008/07/27		67	%	50 - 150		
		Acid Extractable Silver (Ag)	2008/07/27		89	%	75 - 125		
		Acid Extractable Thallium (Tl)	2008/07/27		90	%	75 - 125		
		Acid Extractable Vanadium (V)	2008/07/27		98	%	75 - 125		
		Acid Extractable Zinc (Zn)	2008/07/27		92	%	75 - 125		
		Method Blank	Acid Extractable Antimony (Sb)	2008/07/27	<0.2			ug/g	
			Acid Extractable Arsenic (As)	2008/07/27	<1			ug/g	
			Acid Extractable Barium (Ba)	2008/07/27	<0.5			ug/g	
	Acid Extractable Beryllium (Be)		2008/07/27	<0.2			ug/g		
	Acid Extractable Cadmium (Cd)		2008/07/27	<0.1			ug/g		
	Acid Extractable Chromium (Cr)		2008/07/27	<1			ug/g		
	Acid Extractable Cobalt (Co)		2008/07/27	<0.1			ug/g		
	Acid Extractable Copper (Cu)		2008/07/27	<0.5			ug/g		
	Acid Extractable Lead (Pb)		2008/07/27	<1			ug/g		
	Acid Extractable Molybdenum (Mo)		2008/07/27	<0.5			ug/g		
	Acid Extractable Nickel (Ni)		2008/07/27	<0.5			ug/g		
	Acid Extractable Selenium (Se)		2008/07/27	<0.5			ug/g		
	Acid Extractable Silver (Ag)		2008/07/27	<0.2			ug/g		
	Acid Extractable Thallium (Tl)		2008/07/27	<0.05			ug/g		
	Acid Extractable Vanadium (V)		2008/07/27	<5			ug/g		
	Acid Extractable Zinc (Zn)		2008/07/27	<5			ug/g		
	RPD		Acid Extractable Antimony (Sb)	2008/07/27	NC			%	35
		Acid Extractable Arsenic (As)	2008/07/27	NC			%	35	
		Acid Extractable Barium (Ba)	2008/07/27	4.7			%	35	
		Acid Extractable Beryllium (Be)	2008/07/27	NC			%	35	
		Acid Extractable Cadmium (Cd)	2008/07/27	NC			%	35	
		Acid Extractable Chromium (Cr)	2008/07/27	NC			%	35	
		Acid Extractable Cobalt (Co)	2008/07/27	3.2			%	35	
Acid Extractable Copper (Cu)		2008/07/27	3.8			%	35		
Acid Extractable Lead (Pb)		2008/07/27	NC			%	35		
Acid Extractable Molybdenum (Mo)		2008/07/27	NC			%	35		
Acid Extractable Nickel (Ni)		2008/07/27	7.8 (4)			%	35		
Acid Extractable Selenium (Se)		2008/07/27	NC			%	35		
Acid Extractable Silver (Ag)		2008/07/27	NC			%	35		
Acid Extractable Thallium (Tl)	2008/07/27	NC			%	35			
Acid Extractable Vanadium (V)	2008/07/27	7.3			%	35			
Acid Extractable Zinc (Zn)	2008/07/27	3.4			%	35			

NC = Non-calculable

RPD = Relative Percent Difference

QC Standard = Quality Control Standard

SPIKE = Fortified sample

( 1 ) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

( 2 ) The recovery in the matrix spike was not calculated (NC). Because of the high concentration of this analyte in the parent sample, the relative difference between the spiked and unspiked concentrations is not sufficiently significant to permit a reliable recovery calculation.

( 3 ) The recovery in the matrix spike was not calculated (NC). Spiked concentration was less than 2x that native to the sample.

DST Consulting Engineers  
Attention: Nick Norton  
Client Project #: OEOT009067  
P.O. #:  
Project name: SHEFFIELD

Quality Assurance Report (Continued)

Maxxam Job Number: TA879154

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
( 4 )		Detection Limit was raised due to matrix interferences.					

Validation Signature Page

Maxxam Job #: A879154

---

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

*Cristina Nervo*

---

CHRISTINA NERVO, Scientific Services

*Steve Roberts*

---

STEVE ROBERTS, Analyst, Hydrocarbons

*Troy Carriere*



---

TROY CARRIERE, B.Sc., C.Chem, Scientific Specialist

*Yuan Zhou*

---

YUAN ZHOU, gc\ms Technician

---

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. SCC and CAEAL have approved this reporting process and electronic report format.

**ATTACHMENT C**  
**Qualifications of Assessor(s)**



### Qualifications of Assessor(s)

**Shahid Mansur, P.Eng.**, is the senior reviewer. He has fifteen years of engineering experience related to the environmental industry. Mr. Mansur is currently a senior engineer with DST. He is a designated "Qualified Person" as defined under O.Reg. 153/04. His responsibilities include project management, environmental and geotechnical engineering, site investigations, testing and inspection, construction plans and engineering reviews. Mr. Mansur has worked on numerous projects involving environmental, geotechnical, and civil engineering studies, as well as quality assurance and quality control. He has extensive experience in the environmental industry including Phase I, II and III Environmental Site Assessments, remediation investigations, feasibility studies, remediation/ mitigation design and implementation, hydrogeological assessments, geotechnical assessments, etc.

**Jane MacIntosh, B.Tech, CCEP**, is an Environmental Scientist with DST Consulting Engineers Inc., with experience in a wide range of environmental projects, including Phase I, II and III Environmental Site Assessments (ESAs), Environmental Research, Drinking Water Quality Assessments, Indoor Air Quality (IAQ) Assessments, Environmental Inspections and ambient air/occupational exposure monitoring. Her field activities include site inspections, environmental drilling including the installation of groundwater monitoring wells with soil and groundwater sampling, surveying and long-term ambient air monitoring programs. Her office duties include project management, the preparation of technical reports and cost proposals, technical desk-top environmental research, quality assurance/quality control (QA/QC) report review, air photo and data interpretation, historical records review, and geological map review.

**ATTACHMENT D**  
**Limitations of the Assessment**

## **LIMITATIONS**

The information, conclusions and recommendations given herein are specifically for this project and Ross and Anglin Ontario Limited ("Client") only, and the scope of work described herein. It may not be sufficient for other uses.

As documented in this report, some information used by DST Consulting Engineers Inc. (DST) in this assessment has been obtained from various sources of information (i.e. laboratories) believed to be reliable. Although our recommendations are partly based on such information, our services did not include the verification of its accuracy or authenticity. Should such information prove to be inaccurate or unreliable, DST reserves the right to amend or revise its recommendation.

The conclusions and recommendations regarding environmental conditions, which are presented in this report, are based on a scope of work authorized by the Client. Note, however, that virtually no scope of work, no matter how exhaustive, can identify all contaminants or all conditions above and below ground. For example, conditions between test pits may differ from those encountered in the investigation and conditions may change with time. This report therefore cannot warrant that all conditions on or off the site are represented by those identified at specific locations.

Note also that standards, guidelines and practices related to environmental investigations may change with time. Those which were applied at the time of this investigation may be obsolete or unacceptable at a later date.

Any topographic benchmarks and elevations used in this report are primarily to establish relative elevation differences between test locations and should not be used for other purposes such as grading, excavation, planning, development, etc.